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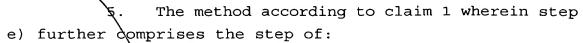
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I claim:

- A method for assessing chemosensitivity of patient cells comprising the steps of:
- a) harvesting a specimen of a patient's tissue, cells ascites, or effusion fluid;
- b) separating said specimen into multicellular particulates;
- c) growing a tissue culture monolayer from said cohesive multicellular particulates;
- d) inoculating cells from said monolayer into a plurality of segregated sites; and
- e) treating said plurality of sites with at least one active agent, followed by assessment of chemosensitivity of the cells in said site to at least one active agent.
- 2. The method according to claim 1 wherein step a) further comprises the step of
- a) preparing a specimen which was harvested from a sample of patient tumor tissue;.
- 3. The method according to claim 1 wherein said plurality of segregated sites further comprises a plate containing a plurality of wells therein.
- 4. The method according to dlaim 1 wherein stepe) further comprises the step of:
- e) treating said plurality of sites with a plurality of active agents at varied concentrations, followed by assessment of optimal chemosensitivity with respect to a single active agent at a single concentration.

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- e) treating said plurality of sites with a plurality of active agents over a length of time adequate to permit assessment of both initial cytotoxic effect and longer-term inhibitory effect of at least one of said plurality of active agents.
- 6. The method according to claim 1 wherein the chemosensitivity assayed according to step e) is anticancer sensitivity.
- 7. The method according to claim 1 wherein step d) is accomplished using a Terasaki dispenser.
- 8. The method according to claim 1 wherein the cells in step d) are prepared in suspension prior to inoculation into a plurality of wells in a culture plate.
- 9. The method according to claim 1, wherein said active agent is a chemotherapeutic agent.
- 10. The method according to claim 1, wherein said active agent is a wound healing agent.
- 11. The method according to claim 1, wherein said active agent is a radiation therapy and/or a radiation therapy sensitizing or ameliorating agent.
- 12. The method according to claim 1, where said active agent is an immunotherapeutic agent.

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